

REMARKS***Summary of the Response***

No claims have been amended with the instant response. Accordingly, claims 15 – 34 remain pending and under consideration by the Examiner. Reconsideration of the rejected claims in view of the following remarks is respectfully requested.

Summary of the Office Action

In the instant Office Action, the Examiner has rejected previously presented claims 15 – 24 and 28 – 32 for being indefinite and rejected claims 12, 17, 19, 28 – 30 and 32 over prior art. Additionally, the Examiner indicated claims 33 and 34 are allowed and claims 25 – 27 would be allowable if rewritten in independent form. By the present remarks, Applicant respectfully submits that all the rejections have been overcome, and respectfully requests reconsideration of the outstanding Office Action and allowance of the present application.

Allowable Subject Matter

Applicant appreciates the Examiner's indication that claims 33 and 34 are allowed and that claims 25 – 27 would be allowable if rewritten in independent form. However, Applicant respectfully submits that all of the claims are allowable for the following reasons.

Traversal of Drawing Objection

Applicant traverses the objection to the drawings under 37 C.F.R. 1.83(a). Specifically, the Examiner has objected to the drawings for failing to show the features of claim 29, which recites “. . . being structured and arranged as a crossbow.” Applicant respectfully submits that a

crossbow is well known in the art, such that one of ordinary skill in the art would understand the present invention absent a depiction thereof.

Moreover, Applicant submits that at least Figures 6 and 7 include parallel mounted pulleys, such that the outer-most pulleys are mounted further from the longitudinal axis of the spear gun. As such, Applicant submits at least Figures 6 and 7 illustrate an example of "being structured and arranged as a crossbow."

Thus, for at least these reasons, Applicant respectfully submits the objection to the drawings under 37 C.F.R. 1.83(a) should be withdrawn, and requests the Examiner indicate that the drawings fully comply with the requirements of 37 C.F.R. 1.83(a).

Traversal of Rejection under 35 U.S.C. § 112, 2nd Paragraph

Applicant traverses the rejection of claims 15 – 24 and 28 – 32 under 35 U.S.C. § 112, 2nd paragraph for being indefinite. Specifically, the Examiner asserted it was "not clear what the tensioning rubber bands tension, since they are not claimed as connected to any other feature." Applicant respectfully disagrees.

Applicant respectfully notes that 35 U.S.C. 112, 2nd paragraph states:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

According to MPEP 2173.02, the test for definiteness under 35 U.S.C. 112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). Moreover, definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application

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disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

Claim 15 recites, in pertinent part:

... a barrel extending to a head;
propelling rubber bands and tensioning rubber bands; and
pulleys, located at the head, arranged to guide the propelling
rubber bands to pass from a top of the barrel to an underside of the barrel,
wherein the shaft is propelled along an entire length of the barrel.

Applicant respectfully submits that all of the recited claim terms are clear and unambiguous and fully supported by the instant specification. For example, Applicant has reproduced paragraphs [0004] and [0029] – [0032] (as numbered in the substitute specification) below, which explain the recited claim terms and the operation of the instant invention, stating (emphasis added):

[0004] By placing a system at the end of the gun (bars, pulleys, axles, rollers, sheaves, bearings, wheels) that allows the rubbers to pass from the top to the underside of the gun stock, and by loading rubber bands onto the shaft that are complemented by other rubber bands loaded onto the underside of the barrel at various anchor points, propulsion along the entire length of the stock is achieved. Compared to a conventional gun of equal length, one notes that propelling a shaft with a similar length, diameter, and number of rubber bands of the same type, a shaft propelled along the entire length of the barrel goes faster, farther, and with no recoil, compared to a shaft propelled along two thirds of the barrel. . . .

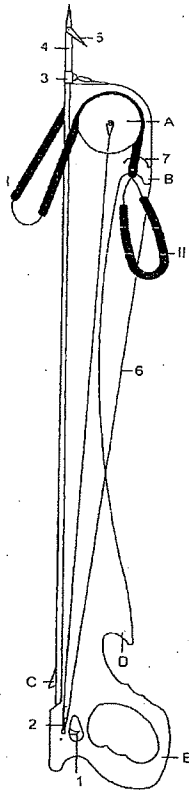
[0029] The shaft (4) is catapulted along the entire length of the gun by the rubber bands (I, II). The wire (a) connecting the rubber bands that propels the shaft (4) ends its stroke one centimeter away from the end of the barrel against the stock, and the rubber bands are still tensioned at the end of the stroke. The wire (a) ends up abutted against the top part of the stock, otherwise the shaft (4) would be destabilized if the wire (a) of the rubber bands (I, II) touched the heel of the shaft (4) while passing to the underside.

[0030] At the head of the barrel is a system that facilitates the passage and the tension of the rubber bands (I, II) from the top to the underside of the gun. This system can consist of axles, bars, pulleys, rollers, bearings, wheels, and/or sheaves. It is attached of screws, threaded bolts, axles, tubes, washers, and/or nuts.

[0031] For practical purposes, a rubber band of very large cross-section (I) is loaded onto the shaft (4), passed through the pulleys (A) and joined on the underside to multiple rubber bands (II) (one, two, three or more) with a diameter smaller than the rubber bands at the top and of various lengths to allow for better elastic recovery, ease of loading, and power.

[0032] The system for attaching the rubber bands (I, II) to the stock (B-D) can come in various forms depending on whether it is the wire (a) that joins the rubber bands (I, II) or their bodies that are anchored. Catches, which are either fixed or adjustable (mounted on a rail), or large notches, serve as bearing points. For the propelling band (I), the lower end of the stock can serve as a direct bearing point (B); in this case, the barrel extends further past the pulleys. The underside rubber bands (II) can be joined to the rubber band (I) either by the rubber band body or by the wire (a). The pulleys at the barrel end can be mounted in series (Fig. 5), in parallel (Fig. 6), or in parallel series (Fig. 7) to increase the number of rubber bands. If the number of rubber bands on the shaft and underneath the stock is increased, thus supercharging the rubber bands, one will use catches as bearing points and the rubber bands will have a connecting wire (a) at each end.

Additionally, Applicant has reproduced Figure 1 of the instant application below, which provides support for the recited claim terms and illustrates the assembly and relationship of the propelling rubber band (I) and the tensioning rubber band (II).



In light of the above, Applicant respectfully submits that those skilled in the art, after reviewing the specification and claims, would understand the subject matter recited in the claims and readily understand the scope of the claims. That is, Applicant submits the recited claim terms are clear and unambiguous, and that Figure 1 and paragraphs [0004] and [0029] – [0032] of Applicant’s application provide clear support for the recited claim terms. Moreover, Applicant notes that Figure 1 and paragraphs [0004] and [0029] – [0032] clearly explain how the parts are assembled to be able to propel a shaft (i.e., how the propelling rubber bands are related to the tensioning rubber bands and how the rubber bands are able to propel a shaft along the entire barrel) and fully describe the elements recited in the claims to define the scope of embodiments of the invention.

Moreover, Applicant respectfully reminds the Examiner of the guidance provided by MPEP § 2173.04 regarding “Breadth is Not Indefiniteness,” which states (emphasis added):

Breadth of a claim is not to be equated with indefiniteness. *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph.

Applicant respectfully submits that the scope of the subject matter embraced by the claims is clear. Thus, for the above reasons, Applicant submits that claim 15 is not indefinite. Accordingly, Applicant respectfully requests the rejection of claims 15 – 24 and 28 – 32 be reconsidered and withdrawn.

Traversal of Rejection Under 35 U.S.C. § 102 (b)

Applicant traverses the rejection of claims 15, 17, 19, 28 – 30 and 32 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,029,850 issued to Van Straaten [hereinafter “VAN STRAATEN”].

Independent Claim 15

Claim 15 recites, in pertinent part:

... a barrel extending to a head;
propelling rubber bands and tensioning rubber bands; and
pulleys, located at the head, arranged to guide the propelling
rubber bands to pass from a top of the barrel to an underside of the barrel,
wherein the shaft is propelled along an entire length of the barrel.

To anticipate a claim, each and every element as set forth in the claim must be found, either expressly or inherently described, in a single prior art reference. MPEP § 2131. Applicant submits VAN STRAATEN does not disclose each of the features of the present invention. For example, Applicant submits that VAN STRAATEN at least does not disclose: (1) propelling rubber bands and tensioning rubber bands; and (2) an arrangement such that the shaft is propelled along an entire length of the barrel.

VAN STRAATEN discloses an exercising apparatus. More specifically, VAN STRAATEN disclose an exercising apparatus having elastic bands extending between anchor points on a bottom bar and pulleys on a top bar. The free ends of the elastic bands are engaged individually or jointly by handles. A brace extends between stretchers spacing the bars apart. By standing on the bottom bar while the apparatus leans against a wall, a large number of exercises can be performed by manipulating the handles.

In addressing claim 15, the Examiner asserts VAN STRAATEN discloses:

. . . a device including a structure 12 which may be a “barrel”, extending from a head 11; rubber bands 17, some of which may be designated “propelling rubber bands”, and some of which may be designated “tensioning rubber bands”; and pulleys 20 at the head, which guides the propelling rubber bands from a top of the barrel to the underside of the barrel. . . . For example, one could place a spear parallel to “barrel” 12, then pull down one of the bands 17 and attach it to the rear of the spear, and release, and the spear would be propelled along the entire length of the barrel as the band is retracted around the pulley.

Applicant respectfully disagrees.

No Disclosure of Propelling Rubber Bands And Tensioning Rubber Bands

Applicant submits that VAN STRAATEN does not disclose propelling rubber bands and tensioning rubber bands. In addressing these two distinct features (i.e., the propelling rubber

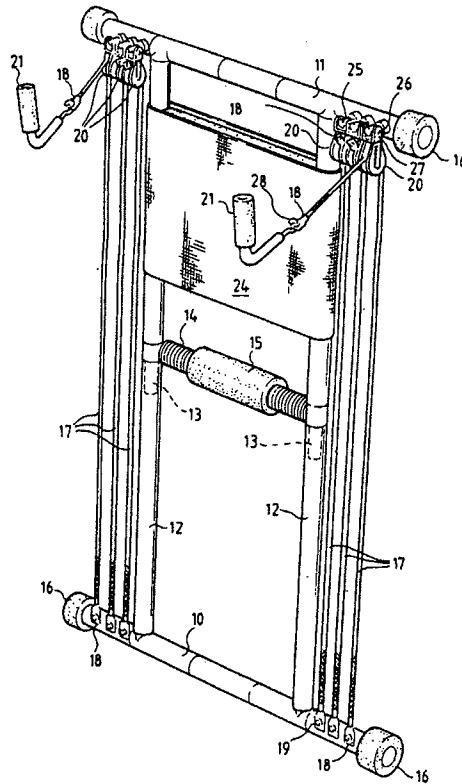
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bands and tensioning rubber bands) of the present invention, the Examiner impermissibly designates the same element (i.e., the bands 17) of VAN STRAATEN as both the recited propelling rubber bands and the recited tensioning rubber bands. That is, VAN STRAATEN merely discloses a plurality of elastic bands 17 on each side of the apparatus, which can be used individually or in combination to set the tension of the elastic band for exercising. However, each of these elastic bands operates in the same way with the same structure and arrangement. As such, Applicant submits the Examiner is not free to designate the same element of VAN STRAATEN, i.e., the elastic bands 17, as distinct elements of the present invention, i.e., the propelling rubber bands and the tensioning rubber bands.

As such, for at least these reasons, Applicant respectfully submits that the rejection of claim 15 is *per se* improper.

No Disclosure Of The Shaft Being Propelled Along An Entire Length Of The Barrel

Additionally, Applicant submits that VAN STRAATEN does not disclose an arrangement such that the shaft is propelled along an entire length of the barrel. As discussed above, the Examiner has designated element 12 in Figure 1 as the recited barrel and the bands 17 as both the tensioning and propelling rubber bands. Applicant has reproduced Figure 1 of VAN STRAATEN below.



As shown in Figure 1, the bands 17 travel around pulleys 20 and attach to bar 10. However, as shown in Figure 1, the pulleys 20 are not located at the end of the Examiner-designated barrel 12. That is, the pulleys 20 are located below the end of the Examiner-designated barrel. As such, were the exercise device of VAN STRAATEN to be operated as the Examiner asserts (which Applicant does not concede is possible), Applicant submits that the VAN STRAATEN device does not disclose an arrangement such that the shaft is propelled along an entire length of the barrel, as the Examiner-designated barrel extends beyond the region in which propulsion can be provided by the bands 17. Additionally, because the elastic bands of VAN STRAATEN are no longer in tension once the free end of the elastic bands approaches the

end of Examiner-designated “barrel,” the elastic band of VAN STRAATEN would no longer propel a spear placed therein.

Thus, for at least these reasons, Applicant submits that for at least a portion of the Examiner-designated barrel, no propulsion is provided by the by the bands 17, and thus, VAN STRAATEN fails to disclose the shaft is propelled along an entire length of the barrel.

Therefore, for at least these reasons, Applicant submits that VAN STRAATEN fails to disclose each of the features of claim 15, and does not anticipate the present invention. Accordingly, for at least these reasons, Applicant respectfully requests the Examiner withdraw the rejection of claim 15 and indicate claim 15 is allowable.

Dependent Claims 17, 19, 28 – 30 and 32

Applicant respectfully submits that claims 17, 19, 28 – 30 and 32 depend from an allowable independent claim, and are allowable based upon the allowability of the independent claim, and because these claims recite additional subject matter to further define the instant invention.

Claims 19 and 28 – 30

Additionally, Applicant submits the rejection of claims 19 and 28 – 30 is *per se* improper. That is, while the Examiner stated that these claims were rejected, the Examiner never addressed any of the features of these claims. The Examiner is reminded of the guidance provided by 37 C.F.R. § 1.104(a)(1) regarding the Nature of Examination (emphasis added):

On taking up an application for examination . . . the examiner shall make a thorough study thereof and shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention. The examination shall be complete with respect to both compliance of the

application . . . with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated.

Furthermore, the Examiner is respectfully reminded of the guidance provided by MPEP § 2143.03 regarding All Claim Limitations Must be Taught or Suggested, which states (emphasis added):

. . . [a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.

Thus, as discussed further below, Applicant submits that the Examiner has not provided a complete action or a clear record.

Accordingly, for at least these reasons, Applicant respectfully requests the Examiner withdraw the rejection of claims 17, 19, 28 – 30 and 32 and indicate claims 17, 19, 28 – 30 and 32 are allowable.

Complete Action Not Provided

As discussed above, Applicant submits that a clear issue was not developed between the Examiner and Applicant. For example, Applicant submits that the Examiner did not treat the features of claims 19 and 28 – 30 at all. Additionally, with regard to claim 15, Applicants submit that the Examiner impermissibly designated the same feature of the prior art as distinct features of the present invention.

MPEP §706 states:

Before final rejection is in order a clear issue should be developed between the examiner and applicant. To bring the prosecution to as speedy conclusion as possible and at the same time to deal justly by both the applicant and the public, the invention as disclosed and claimed should be thoroughly searched in the first action and the references fully applied; and in reply to

this action the applicant should amend with a view to avoiding all the grounds of rejection and objection.

Additionally, MPEP 706.07(a) notes:

Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p). ...

Furthermore, a second or any subsequent action on the merits in any application ... will not be made final if it includes a rejection, on newly cited art, other than information submitted in an information disclosure statement filed under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17 (p), of any claim not amended by applicant or patent owner in spite of the fact that other claims may have been amended to require newly cited art.

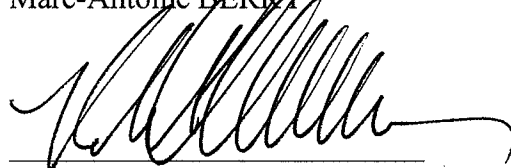
Accordingly, Applicant respectfully requests that the Examiner address the untreated features of the present invention and not impermissibly designate the same element of the prior art as distinct elements of the present invention, such that a clear issue is developed between the Examiner and Applicant. Moreover, Applicant respectfully submits that the next action, which should clarify the record, cannot be a final action.

CONCLUSION

In view of the foregoing remarks, it is submitted that the pending rejection has been discussed and traversed. Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all of the claims therein are respectfully requested and now believed to be appropriate.

The Commissioner is hereby authorized to charge and fees necessary for the consideration of this paper to deposit account 19-0089.

Respectfully submitted,
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